

PATENT APPLICATION TRANSMITTAL LETTER
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mailed Feb. 23, 2000

Commissioner of Patents and Trademarks
Washington, District of Columbia 20231

Sir:

Please file the following enclosed design patent/utility patent application papers:

Applicant #1, Name: Eric MAO

Applicant #2, Name: _____

Title: METHOD OF FORMING A TRADE MARK ON A RIBBON STRIPE

(V) Specification, Claims, and Abstract: Nr. Of Sheets (in triplicate): 11

(V) Declaration: Date signed: February 23, 2000

(V) Drawing(s): Nr. of Sheets Enc. (in triplicate): Formal: 4

(V) Small Entity Declaration of Inventor(s)

(V) SED of Non-Inventor/Assignee/Licensee

() Assignment; please record and return; recordal fee enclosed.

(V) Check for \$ 345.00 for:

(V) \$ 345.00 for filing fees (not more than three independent claims and twenty total claims are presented).

() \$40.00 Additional if Assignment is enclosed for recordal.

(V) Return Receipt Postcard Addressed to Applicant #1.

Very respectfully,

Eric Mao

Applicant #1 signature

PO BOX 82-144, TAIPEI TAIWAN

Applicant #2 Signature

Address (Send Correspondence Here)

Express Mail label # _____ ; Date of Deposit

I hereby certify that this paper or fee is being deposited with the United States Postal Service using "Express Mail Post Office To Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to "Commissioner of Patents and Trademarks, Washington, D.C. 20231."

Signed

Eric MAO
Inventor(s)

Eric MAO

Independent Inventor

Attorney's
Docket No. _____

VERIFIED STATEMENT OF SMALL ENTITY STATUS

Honorable Commissioner of Patents and Trademarks
Washington, D. C. 20231

Sir:

I hereby declare that I am ☒ the sole inventor ☐ a joint inventor of the
invention entitled: METHOD OF FORMING A TRADE MARK ON A RIBBON STRIPE

_____;
the invention being described and claimed ☒ in the specification filed herewith, ☐ in the
specification of application Serial No. _____, filed _____
19____; and that I have not assigned, granted, conveyed, or licensed, and that I am under
no obligation under contract or law to assign, grant, convey, or license, any rights in the
invention to any person who could not likewise be classified as an independent inventor if
that person had made the invention, or to any concern which would not qualify as a small
business concern or a nonprofit organization.

I further declare that all statements made herein of my own knowledge are
true and that all statements made on information and belief are believed to be true; and
further that these statements were made with the knowledge that willful false statements and
the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title
18 of the United States Code, and that such willful false statements may jeopardize the
validity of the application or any patent issuing thereon.

Date: February 23, 2000

V Eric Mao

Eric MAO

**TITLE: METHOD OF FORMING A TRADE MARK ON A RIBBON
STRIPE**

BACKGROUND OF THE INVENTION

(a) Field of the invention

5 The present invention relates to a trade mark ornamental pattern, and in particular, to a method of forming a trade mark pattern on a ribbon stripe, and the ribbon body will not expose from a covering material.

(b) Description of the prior art

10 In conventional method of covering a rigid article with a plastic material, the article is placed within a recess of a mold and then the plastic material is injected into the mold. Thus, the surface of the molded article is provided with a specific mark or logo.

15 However, If a soft ribbon stripe is to provide with a plastic mark, drawbacks may be occurred. The ribbon stripe is a soft material and the end of the stripe cannot be effectively positioned. Under high pressure ejection process, the molded decoration is exposed from the ribbon stripe body after the molding process. Accordingly, these defect products cause an increase in production cost.

SUMMARY OF THE INVENTION

Accordingly, it is an object of the present invention to provide a method of forming a trade mark on a ribbon stripe, wherein defect product formed can be controlled, and the cost of production is greatly reduced.

5 An aspect of the present invention is to provide a method of forming a trade mark decoration on a soft ribbon stripe, comprising the steps of thermal pressing a combination end of the ribbon stripe to cure the texture of the ribbon stripe and increase the gaps of the texture; fastening the combination end onto a mold; mixing ejection molding material with a material similar to
10 or alike the material of the ribbon stripe so that these materials can form as one unit when melt; high pressure ejection molding the ribbon stripe to combine with a primary blank plastic material and a protruded trade mark pattern being formed on the primary blank plastic material; placing the first ejection molded primary blank plastic material into the mold for second ejection
15 molding and the protruded trade mark pattern being located at a recess of the second mold; and processing to a second ejection molding to enclose the primary blank plastic material at the exterior thereof to form an ornamental article.

 The foregoing objects and summary provide only a brief introduction to
20 the present invention. To fully appreciate these and other objects of the

present invention as well as the invention itself, all of which will become apparent to those skilled in the art, the following detailed description of the invention and the claims should be read in conjunction with the accompanying drawings. Throughout the specification and drawings identical reference
5 numerals refer to identical or similar parts. Many other advantages and features of the present invention will become manifest to those versed in the art upon making reference to the detailed description and the accompanying sheets of drawings in which a preferred structural embodiment incorporating the principles of the present invention is shown by way of illustrative example.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a perspective view of a ribbon stripe in accordance with the present invention.

Fig. 2 is a perspective view of a second preferred embodiment
5 of the ribbon stripe in accordance with the present invention.

Figs. 3A, 3B and 3C are schematic views showing the process of manufacturing the ribbon stripe in accordance with the present invention.

Fig. 4 is a perspective view of the primary blank material of the present preferred embodiment.

10 Fig. 5 is a perspective view of the completed ribbon stripe in accordance with the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

For the purpose of promoting an understanding of the principles of the invention, reference will now be made to the embodiment illustrated in the drawings. Specific language will be used to describe same. It will, nevertheless, be understood that no limitation of the scope of the invention is thereby intended, such alterations and further modifications in the illustrated device, and such further applications of the principles of the invention as illustrated herein being contemplated as would normally occur to one skilled in the art to which the invention relates.

Referring to Fig. 1, there is shown a ribbon stripe 10 used for the forming of a trade mark decoration thereon. In accordance with the present invention, a combination end 11 of the ribbon stripe 10 is thermally pressed (as shown in Fig. 3A step). The ribbon stripe 10 is undergone the thermal pressing process at a temperature which does not melt the ribbon stripe 10. This process includes ultra sonic fabrication method which causes the individual fiber unit of the ribbon stripe 10 to cure to an appropriate extent. The extent of curing does not include excessive stages such as the carbonization level, and breaking level.

Referring to Fig. 3, the combination end 11 of the ribbon stripe 10 having heat pressed is placed into a primary mold 20, and the

circumferential edge 21 of the primary mold 20 grips the ribbon body of the combination end 11. By means of a first ejection molding process, a primary blank plastic material 22 is formed at the end of the ribbon stripe 10.

In accordance with the present invention, before the ejection molding of the primary blank plastic material 22, the material 22 has to be pressed and mixed with ribbon stripes or the like by pressing machine to change the molecular structure of the first ejection molding material, so that the molecular structure of the ribbon stripe and the outer enclosed primary blank material are formed as one unit during the process of melting.

Referring to Fig. 4, there is shown a completed first ejection molded blank plastic material 22. As the ribbon stripe 10 is gripped at one edge, under high pressure fabrication process, the ribbon body 23 may expose to the outside and the primary blank plastic material 22 at the surface is formed into a protruded trade mark pattern 24.

The primary blank plastic material 22 is then placed in a second mold 25 with the protruded trade mark pattern 24 located at a recess 26 of the second mold 25. The combination end 11 is secured by the circumferential edge of the mold and is secured at two positions.

After the second ejection process, the primary blank plastic material 22 is then covered again with plastic material so as to totally cover the

ribbon body 23 and to form into an aesthetic trade mark decoration (as shown in Fig. 5).

In accordance with the present invention, if the texture of the ribbon stripe 10 is rough and the thickness of the ribbon stripe is about or larger than 1mm, the ribbon stripe 10 is provided with an excellent hardness if the combination end 11 has been thermally pressed.

The stripe 10 is suitable for combination. Accordingly, the ribbon body 23 will not expose beyond the blank material after the first covering the molded primary blank plastic material 22. Hence, in accordance with the present invention, a fabricated ornamental article is obtained.

Referring to Fig. 2, the combination end 11 of the ribbon stripe 10 is provided with a hole 12 so that the plastic material for ejection and covering can fully flow in and combine to form as one unit.

It will be understood that each of the elements described above, or two or more together may also find a useful application in other types of methods differing from the type described above.

While certain novel features of this invention have been shown and described and are pointed out in the annexed claim, it is not intended to be limited to the details above, since it will be understood that various omissions,

[illegible]

I CLAIM:

1. A method of forming a trade mark decoration on a soft ribbon stripe comprising the steps of :
 - a) thermal pressing a combination end of the ribbon stripe to cure the texture of the ribbon stripe and increase the gaps of the texture;
 - (b) fastening the combination end onto a mold;
 - (c) mixing ejection molding material with a material similar or alike the material of the ribbon stripe so that these materials can form as one unit when melt;
 - (d) high pressure ejection molding the ribbon stripe to combine with a primary blank plastic material and a protruded trade mark pattern being formed on the primary blank plastic being formed on the primary blank plastic material;
 - (e) placing the first ejection molded primary blank plastic material into the mold for second ejection molding and the protruded trade mark pattern being located at a recess of the second mold; and
 - (f) processing to a second ejection molding to enclose the

primary blank plastic material at the exterior thereof to form an ornamental article.

2. The method as set forth in Claim 1, wherein the thermal pressing process is a ultrasonic fabrication process.

5 3. The method as set forth in Claim 1, wherein the ribbon stripe is obtained from a first ejection molding of primary blank plastic material.

ABSTRACT OF THE DISCLOSURE

A method of forming a trade mark decoration on a soft ribbon stripe comprising the steps of thermal pressing a combination end of the ribbon stripe to cure the texture of the ribbon stripe and increase the gaps of the texture; fastening the combination end onto a mold; mixing ejection molding material with a material similar or alike the material of the ribbon stripe so that these materials can form as one unit when melt; high pressure ejection molding the ribbon stripe to combine with a primary blank plastic material and a protruded trade mark pattern being formed on the primary blank plastic material; placing the first ejection molded primary blank plastic material into the mold for second ejection molding and the protruded trade mark pattern being located at a recess of the second mold; and processing to a second ejection molding to enclose the primary blank plastic material at the exterior thereof to form an ornamental article.

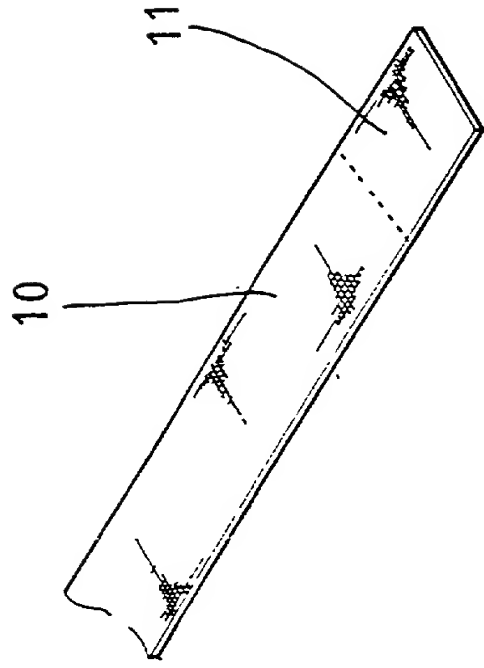


FIG. 1

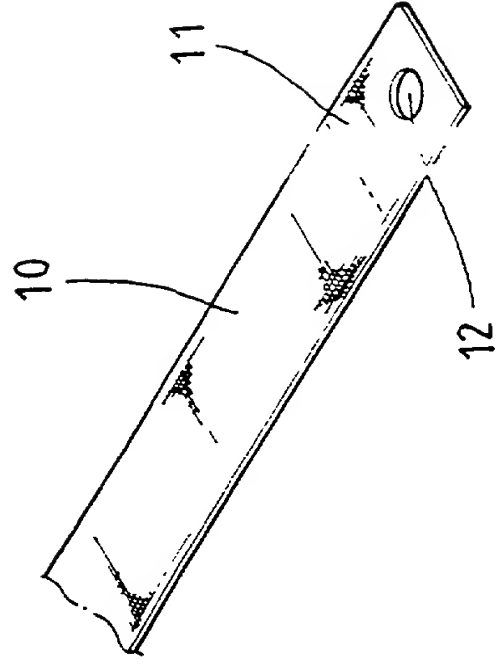


FIG. 2

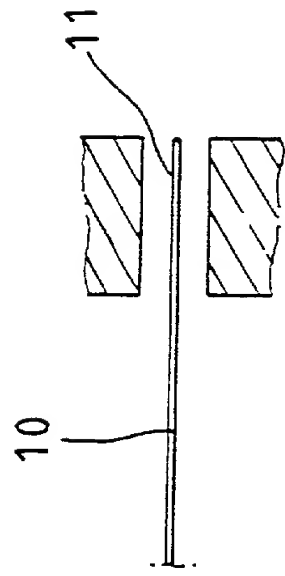


FIG. 3A

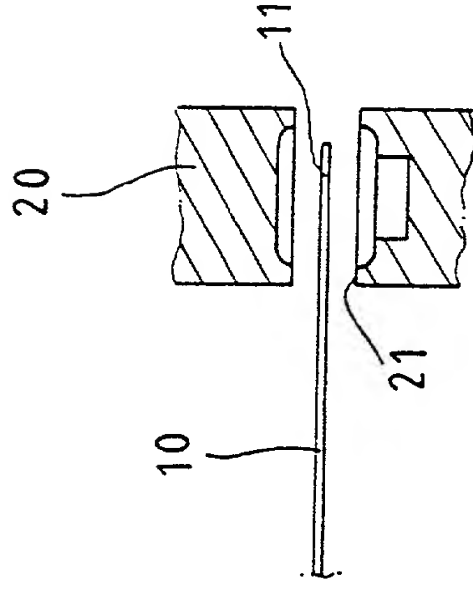


FIG. 3B

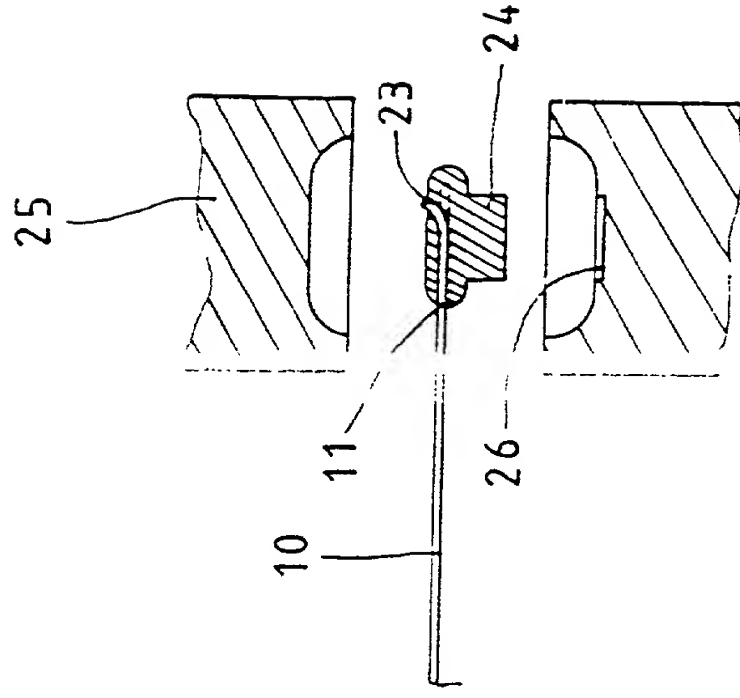


FIG. 3C

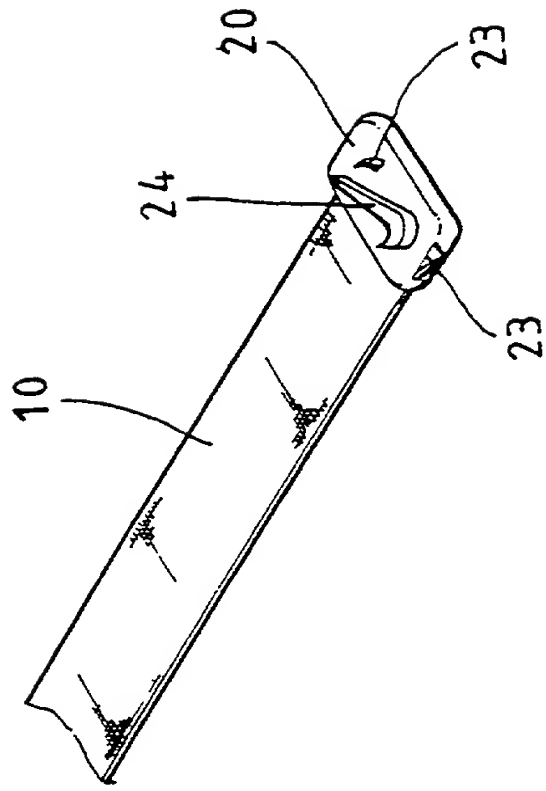


FIG. 4

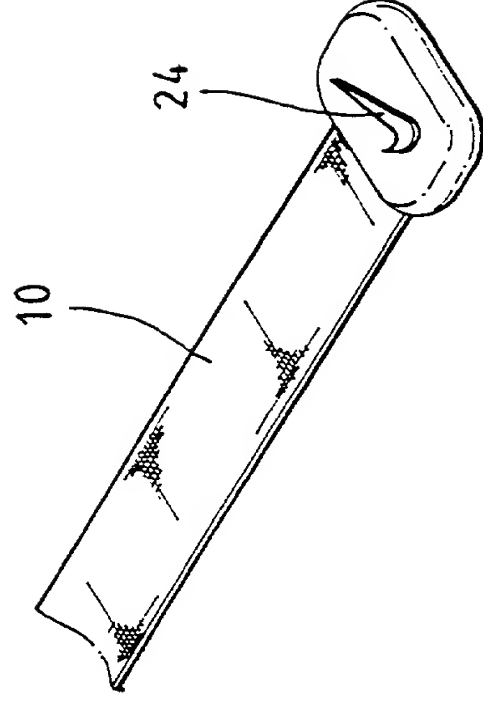


FIG. 5

Declaration For Patent Application

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor(if only one name is listed below) or an original, first and joint inventor(if plural names are listed

below) of the subject matter which is claimed and for which a patent is sought on the invention entitled METHOD OF FORMING

A TRADE MARK ON A RIBBON STRIPE

, the specification of which

(check one) ☒ is attached hereto.

☐ was filed on _____ as

Application Serial No. _____

and was amended on _____
(if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claim(s), as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)

Priority Claimed

<u>99 1 05957.3</u>	<u>People's Republic of China</u>	<u>May 4, 1999</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)	
_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)	
_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
(Number)	(Country)	(Day/Month/Year Filed)	

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

_____	_____	_____
(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)
_____	_____	_____
(Application Serial No.)	(Filing Date)	(Status) (patented, pending, abandoned)

And I hereby appoint as principal attorneys

Please direct all communications to the following address:

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor Eric MAO

Inventor's signature Eric Mao

February 23, 2000

Date

Residence TAIWAN

Citizenship TAIWAN

Post Office Address PO Box 82-144, Taipei, Taiwan

(Supply similar information and signature for second and subsequent joint inventors.)